CLAIMS

What is claimed is:

1. A method for establishing a network connection between a client system and a network comprising:

(a) collecting real time connectivity information by the client system; and

(b) utilizing the real time connectivity information by the client system to establish a connection with the network.

2. The method of claim 1 further comprising:

(c) utilizing data from a local persistent knowledgebase to establish a connection to the network.

3. The method of claim 1 further comprising:

(c) utilizing data from a server based database to establish a connection to the network.

4. The method of claim 1, wherein the collecting step (a) further includes:

(a1) monitoring and collecting network traffic in real time;

(a2) assigning a weight to the real time network traffic based on popularity; and

(a3) creating a weighted list from the weighted real time network traffic.

5. The method of claim 4 further comprising:

(c) storing the weighted list in the client system.

6. The method of claim 5, wherein the local persistent knowledgebase is stored in the client system.

7. The method of claim 1 further comprising:

(c) utilizing a set of local rules to establish a connection to the network.

8. The method of claim 1, wherein the utilizing step (b) includes:

(b1) detecting a failed connection;

(b2) determining a cause of the failed connection by the client system;

(b3) generating a solution based on the cause and the real time connectivity information; and

(b4) implementing the solution.

9. The method of claim 8, wherein the determining step (b2) includes:

(b2i) analyzing at least one error message associated with the failed connection; and

(b2ii) auditing a plurality of communication devices in the client to determine which of the plurality of communication devices is a potential candidate for connectivity.

10. The method of claim 8, wherein the generating step (b3) includes:

(b3i) analyzing the real time connectivity information to determine a range of IP addresses assigned by a DHCP server;

(b3ii) generating a plurality of IP addresses within the range;

(b3iii) selecting one of the plurality of IP addresses and determining whether it is in use; and

(b3iv) assigning the one IP address to the client system if the one IP address is not in use.

11. The method of claim 8 wherein the utilizing step (b) includes:

(b5) repeating step (b3) for a next solution if the implementation of a previous solution is unsuccessful.